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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,460	04/15/2004	Michael J. Chambers	CHAMBERS 4-4	8315
47396	7590	11/16/2006	EXAMINER	
HITT GAINES, PC AGERE SYSTEMS INC. PO BOX 832570 RICHARDSON, TX 75083			MILLER, BRANDON J	
			ART UNIT	PAPER NUMBER
			2617	

DATE MAILED: 11/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/825,460

Applicant(s)

CHAMBERS ET AL.

Examiner

Brandon J. Miller

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 11-17 and 19-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 11-17 and 19-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 11-12, 17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (US 2004/0095500 A1) in view of Mishio (US 2002/0048459 A1).

Regarding claim 1 Sato teaches a mobile communication device, comprising: a main body; and a camera module (see abstract and paragraph [0039]). Sato teaches a camera module, coupled to the main body and configured for movement with respect thereto between a retracted position and an exposed position (see paragraphs [0042] & [0061]). Sato teaches a camera module being rotatable in the exposed position about at least one axis of rotation (see paragraphs [0015] & [0042]). Sato does not specifically teach detecting a position of the camera module relative to the main body; and a memory with at least one stored program and a microprocessor by which the program can be executed, the program automatically configuring a display of the mobile device for a particular application based on the position. Mishio teaches detecting a position of the camera module relative to the main body; and a memory with at least one stored program and a microprocessor by which the program can be executed, the program automatically configuring a display of the mobile device for a particular application based on position (see paragraph [0031], [0032] & [0042], a display of the mobile device is automatically configured

based on the position of the camera module for image processing purposes, this image processing purpose relates to a particular application as claimed in the present invention). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include detecting a position of the camera module relative to the main body; and a memory with at least one stored program and a microprocessor by which the program can be executed, the program automatically configuring a display of the mobile device for a particular application based on the position because the camera module in Sato is rotatable and it would allow for a camera module of a mobile device to be used efficiently by automatically controlling camera function based on the detected position of the camera module.

Regarding claim 2 Sato teaches a camera module that translates to move between the retracted position and the exposed position (see paragraph [0014] & [0065]).

Regarding claim 3 Sato teaches wherein the at least one axis of rotation is essentially perpendicular to a direction of the movement (see paragraph [0015] and FIG. 1).

Regarding claim 4 Sato teaches the camera module is rotatable at least from a front side position to a back side position in the exposed position (see paragraph [0015] and FIG. 1).

Regarding claim 11 Mishio teaches activating a power supply to the camera module (see claim 4, page 4).

Regarding claim 12 Mishio teaches an electronic detector (see paragraph 0024).

Regarding claim 17 Sato teaches a method of operating a retractable rotatable camera module (see paragraph [0014] & [0015]). Sato teaches deploying the camera module by releasing a user-releasable retainer (see paragraph [0063] & [0065]). Sato teaches the camera module to move from a retracted position to an exposed position with respect to a main body of

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an associated mobile communication device (see paragraph [0061] & [0065]). Sato teaches rotating the camera module about at least one axis of rotation (see paragraph [0015] & [0077]). Sato does not specifically teach detecting a position of a camera module relative to the main body; and automatically configuring a display of the mobile device for a particular application based on the position. Mishio teaches detecting a position of the camera module relative to the main body; and a memory with at least one stored program for automatically configuring a display of the mobile device for a particular application based on position (see paragraph [0031], [0032] & [0042], a display of the mobile device is automatically configured based on the position of the camera module for image processing purposes, this image processing purpose relates to a particular application as claimed in the present invention). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include detecting a position of a camera module relative to the main body; and automatically configuring a display of the mobile device for a particular application based on the position because the camera module in Sato is rotatable and it would allow for the camera module of a mobile device to be used efficiently by automatically controlling camera function based on the detected position of the camera module.

Regarding claim 19 Sato teaches detecting a rotational orientation of the camera module of the camera module (see paragraph [0015] & [0050]).

Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (US 2004/0095500 A1) in view of Mishio (US 2002/0048459 A1) and Sawada (US 2003/0174239 A1).

Regarding claim 5 Sato and Mishio teach a device as recited in claim 1 except for wherein the camera module is rotatable about at least two axes of rotation in the exposed position. Sawada teaches a camera module that is rotatable about at least two axes of rotation in an exposed position (see paragraphs [0012] & [0073]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the rotation be about at least two axes of rotation because this would allow for improved adjustment of an imaging direction of the imaging lens portion.

Regarding claim 6 Sawada teaches two axes of rotation that are essentially perpendicular (see paragraphs [0012] & [0073]).

Claims 7-8, 13, and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (US 2004/0095500 A1) in view of Mishio (US 2002/0048459 A1) and Saari et al. (US 6,532,035 B1).

Regarding claim 7 Sato and Mishio teach a device as recited in claim 4 except for wherein a display is configured for digital photography when the camera is detected in a back side position and configured for video conferencing when a camera is detected in a front side position. Sato does teach a camera module that is rotatable at least from a front side position to a back side position in the exposed position (see paragraph [0015] and FIG. 1). Mishio does teach detecting a position of the camera module relative to the main body; and configuring a display of the mobile device for a particular application based on position (see paragraph [0031]). Saari teaches a display that is configured for digital photography when the camera is detected in a back side position and configured for video conferencing when a camera is detected in a side position (see col. 5, lines 27-37 and FIGS. 1 & 2). It would have been obvious to one of ordinary skill in

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the art at the time the invention was made to make the device adapt to include wherein a display is configured for digital photography when the camera is detected in a back side position and configured for video conferencing when a camera is detected in a front side position because this would allow for a camera module of a mobile device to be used efficiently by automatically controlling camera function based on the detected position of the camera module.

Regarding claim 8 Sato and Mishio teach a device as recited in claim 1 except for wherein a display is configured for digital photography or video telephony based on position. Saari teaches wherein a display is configured for digital photography (see col. 5, lines 35-37) or video telephony based on position (see col. 5, lines 27-34). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include wherein a display is configured for digital photography or video telephony based on position because this would allow for a camera module of a mobile device to be used efficiently by automatically controlling camera function based on the detected position of the camera module.

Regarding claim 13 Saari teaches wherein the video telephony is video conferencing (see col. 5, lines 27-34).

Regarding claim 20 Sato, Mishio, and Saari teach a device as recited in claim 7 and is rejected given the same reasoning as above.

Regarding claim 21 Sato and Mishio teach a device as recited in claim 17 except for automatically configuring a display for digital photography or video telephony based on position. Saari teaches automatically moving a camera module employing a motor (see col. 4, lines 33-40). Saari teaches wherein a display is configured for digital photography (see col. 5, lines 35-37) or video telephony based on position (see col. 5, lines 27-34). It would have been obvious to

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one of ordinary skill in the art at the time the invention was made to make the device adapt to include automatically configuring a display for digital photography or video telephony based on position because this would allow for a camera module of a mobile device to be used efficiently by automatically controlling camera function based on the detected position of the camera module.

Regarding claim 22 Sato, Mishio, and Saari teach a device as recited in claim 13 and is rejected given the same reasoning as above.

Claims 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (US 2004/0095500 A1) in view of Saari et al. (US 6,532,035 B1) and Odagiri et al. (US 2004/0041911 A1).

Regarding claim 14 Sato teaches a main body having attaching means for attaching a camera module (see paragraph [0001]). Sato teaches a camera module having complementary attaching means to the main body, such that the camera module is movable with respect to the main body from a retracted position to an exposed position (see paragraphs [0001] & [0061]). Sato teaches a camera module that is rotatable in the exposed position about at least one axis of rotation (see paragraphs [0015] & [0042]). Sato does not specifically teach attaching means comprising means for automatically moving the camera module from the retracted position to the exposed position employing electrical energy and a camera module that is wholly detachable from a mobile communication device. Saari teaches automatically moving a camera module employing electrical energy (see col. 4, lines 33-40). Odagiri teaches attaching means allowing the camera module to be wholly detachable from the mobile communication device (see paragraph [0147]). It would have been obvious to one of ordinary skill in the art at the time the

invention was made to make the device adapt to include automatically moving the camera module from the retracted position to the exposed position employing electrical energy and a camera module that is wholly detachable from a mobile communication device because Sato teaches a movable a camera module (see paragraph [0061]) and it would allow for improved photographic versatility of a mobile phone.

Regarding claim 15 Sato teaches rotating the camera module in the exposed position about at least one axis of rotation (see paragraphs [0014] & [0015]).

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (US 2004/0095500 A1) in view of Odagiri et al. (US 2004/0041911 A1).

Regarding claim 16 Sato teaches a camera module, comprising: attaching means for attaching the camera module to complementary attaching means of a mobile communication device (see paragraphs [0001] & [0061]). Sato teaches a camera, coupled to the attaching means, the camera movable with respect to a main body of the mobile communication device from a retracted position to an exposed position (see paragraphs [0014] & [0061]). Sato teaches a camera module that is rotatable in the exposed position about at least one axis of rotation (see paragraph [0015] & [0042]). Sato does not specifically teach attaching means allowing the camera module to be wholly detachable from the mobile communication device. Odagiri teaches attaching means allowing the camera module to be wholly detachable from the mobile communication device (see paragraph [0147]). It would have been obvious to one of ordinary skill in the art at the time the device was made to make the camera module in Sato adapt to include allowing the camera module to be wholly detachable from the mobile communication device because Sato teaches a movable camera module that is retractable (see paragraph [0061])

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and this would allow for improved switching between various modes of a mobile communication system.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (US 2004/0095500 A1) in view of Mishio (US 2002/0048459 A1) and Nishimoto et al. (US 2004/0242263 A1).

Regarding claim 23 Sato and Mishio teach a device as recited in claim 1 except for activating a flash of the mobile communication device based on position. Mishio does teach detecting a position of the camera module relative to the main body; and performing a particular application based on position (see paragraph [0031]). Nishimoto teaches a flash coupled to a camera module (see paragraph [0023]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include activating a flash of the mobile communication device based on position because this would allow for improved picture quality in a portable telephone apparatus with a camera.

Response to Arguments

Applicant's arguments filed 09/01/2006 have been fully considered but they are not persuasive.

Regarding independent claims 1 and 17 the combination of Sato et al. (US 2004/0095500 A1) and Mishio teaches the devices as claimed.

Mishio teaches a display of a mobile device that is automatically configured based on the position of the camera module for image processing purposes (see paragraph [0031]). Viewing the claim language broadly, this image processing purpose relates to a particular application as

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claimed in the present invention. The claims do not mention multiple applications and furthermore do not define what the “particular application” is.

Regarding independent claim 14 the combination of Sato et al. (US 2004/0095500 A1), Saari et al. (US 6,532,035 B1), and Odagiri et al. (US 2004/0041911 A1) teach a device as claimed.

Odagiri teaches attaching means allowing the camera module to be wholly detachable from the mobile communication device (see paragraph [0147]).

Regarding independent claim 16 the combination of Sato et al. (US 2004/0095500 A1), and Odagiri et al. (US 2004/0041911 A1) teach a device as claimed.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, both Sato and Odagiri teach camera modules that protrude from the side of a mobile terminal device (Sato, see paragraph [0015] and FIG. 1 & Odagiri, see paragraph [0147] and FIG. 3). Allowing the camera module in Sato to be detachable as taught by Odagiri would improve Sato's mobile device by doing even more to not greatly restrict positions in which other functional components are provided, which is a problem that Sato is particularly concerned with solving (see paragraph [0013]).

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Okuzako et al. U.S. Pub. No.: US 2004/0116167 A1 discloses a portable information processing apparatus.

Lee U.S. Pub. No.: US 2004/0198433 A1 discloses a camera lens assembly and portable wireless terminal comprising the same.

Ohe et al. U.S. Pub. No.: US 2003/0090579 A1 discloses a mobile information terminal device and camera unit.

Arai et al. Patent No.: US 6,904,298 B2 discloses a mobile information communicating terminal device having video camera.

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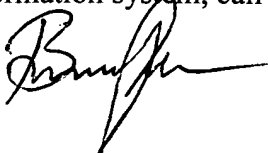
Mizuta U.S. Pub. No.: US 2003/0171133 A1 discloses a slide-type portable communication apparatus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon J. Miller whose telephone number is 571-272-7869.

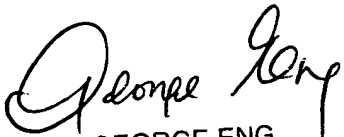
The examiner can normally be reached on Mon.-Fri. 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



November 13, 2006



GEORGE ENG
SUPERVISORY PATENT EXAMINER

